

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/006240

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16L55/134

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L F16K E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 467 835 A (CHAMPLEBOUX JACQUES) 28 August 1984 (1984-08-28) the whole document	1-6
A	US 5 778 982 A (BASKI HENRY A ET AL) 14 July 1998 (1998-07-14) column 13, line 28 - line 36; figures	1,2
A	US 5 702 109 A (BLIN PHILIPPE ET AL) 30 December 1997 (1997-12-30) abstract; figures	1,2
A	GB 2 275 066 A (XL TECHNOLOGY LIMITED) 17 August 1994 (1994-08-17) figures	1,2

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

21 September 2004

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29/09/2004

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4467835	A	28-08-1984	FR 2506893 A1 CA 1177762 A1 GB 2099541 A , B IT 1156021 B NL 8202108 A , B,	03-12-1982 13-11-1984 08-12-1982 28-01-1987 16-12-1982
US 5778982	A	14-07-1998	NONE	
US 5702109	A	30-12-1997	FR 2706575 A1 CA 2164336 A1 DE 69410461 D1 EP 0702747 A1 WO 9500738 A1 NO 955121 A	23-12-1994 05-01-1995 25-06-1998 27-03-1996 05-01-1995 15-02-1996
GB 2275066	A	17-08-1994	NONE	